AMENDMENT

In the Specification:

Please replace Table 5, beginning at page 38, with the following amended Table 5:

Table 5: Alignment of various species OX2R homologs 1 and 2:

```
OX2RH1_MU  MFCFWRTSALAVLLIWGVFVAGSS-------------------------CTDKNQTTQN  (SEQ ID NO: 25)
OX2RH1_RT  MLCFWRTSHVAVLLIWGVFAAESS-------------------------CPDKNQTMQN  (SEQ ID NO: 26)
OX2RH2_MU  ------------------------------------------------------------
OX2RH1_HU  MLCPWRTANLGLLLILTIFLVAEAEGAAQPNNSLMLQTSKENHALASSSLCMDEKQITQN  (SEQ ID NO: 27)
OX2RH2_HU  ---------------------------------------------MGGKQMTQN  (SEQ ID NO: 28)


OX2RH1_MU  NSSSPLTQVNTTVSVQIGTKALLCCFSIPLTKAVLITWIIKLRGLPSCTIAYKVDT-KTN  (SEQ ID NO: 29)
OX2RH1_RT  NSST-MTEVNTTVFVQMGKKALLCCPSISLTKVILITWTITLRGQPSCIISYKADTRETH  (SEQ ID NO: 30)
OX2RH2_MU  ----------------------------------------RGQPSCIMAYKVETKETN  (SEQ ID NO: 31)
OX2RH1_HU  YSKV-LAEVNTSWPVKMATNAVLCCPPIALRNLIIITWEIILRGQPSCTKAYKKETNETK  (SEQ ID NO: 32)
OX2RH2_HU  YSTI-FAEGNISQPVLMDINAVLCCPPIALRNLIIITWEIILRGQPSCTKAYKKETNETK  (SEQ ID NO: 33)
                                                  ** ***  :** :* :*:


OX2RH1_MU  ETSCLGRNITWASTPDHSPELQISAVTLQHEGTYTCETVTPEGNFEKNYDLQVLVPPEVT  (SEQ ID NO: 34)
OX2RH1_RT  ESNCSDRSITWASTPDLAPDLQISAVALQHEGRYSCDIAVPDGNFQNIYDLQVLVPPEVT  (SEQ ID NO: 35)
OX2RH2_MU  ET-CLGRNITWASTPDHIPDLQISAVALQHEGNYLCEITTPEGNFHKVYDLQVLVPPEVT  (SEQ ID NO: 36)
OX2RH1_HU  ETNCTDERITWVSRPDQNSDLQIRTVAITHDGYYRCIMVTPDGNFHRGYHLQVLVTPEVT  (SEQ ID NO: 37)
OX2RH2_HU  ETNCTVERITWVSRPDQNSDLQIRPVDTTHDGYYRGIVVTPDGNFHRGYHLQVLVTPEVN  (SEQ ID NO: 38)
           *: *  . ***.* **  .:*** .*   *:* *    ..*:***.. *.*****.***.


OX2RH1_MU  YFPEKNRSAVCEAMAGKPAAQISWSPDG-DCVTTSESHSNGTVTVRSTCHWEQNNVSDVS  (SEQ ID NO: 39)
OX2RH1_RT  HFPGENRTAVCEAIAGKPAAQISWTPDG-DCVAKNESHSNGTVTVRSTCHWEQSHVSVVF  (SEQ ID NO: 40)
OX2RH2_MU  YFLGENRTAVCEAMAGKPAAQISWTPDG-DCVTKSESHSNGTVTVRSTCHWEQNNVSAVS  (SEQ ID NO: 41)
OX2RH1_HU  LFQNRNRTAVCKAVAGKPAAHISWIPEG-DCATKQEYWSNGTVTVKSTCHWEVHNVSTVT  (SEQ ID NO: 42)
OX2RH2_HU  LFQSRNITAVCKAVTGKPAAQISWIPEGSILATKQEYWGNGTVTVKSTCPWEGH-KSTVT  (SEQ ID NO: 43)
            *  .* :***:*::*****:*** *:*   .:..*  .******:*** **    * *


OX2RH1_MU  CIVSHLT-GNQSLSIELSRGGNQSLRPYIPYIIPSIIILIIIGCICLLKISGFRKCKLPK  (SEQ ID NO: 44)
OX2RH1_RT  CVVSHLTTGNQSLSIELGRGGDQLLGSYIQYIIPSIIILIIIGCICLLKISGCRKCKLPK  (SEQ ID NO: 45)
OX2RH2_MU  CIVSHST-GNQSLSIELSRGTTSTTPSLLTILYVKMVLLGII----LLKV-G--FAFFQK  (SEQ ID NO: 46)
OX2RH1_HU  CHVSHLT-GNKSLYIEL---LPVPG--AKKISKIIYSIYHPY--YYYLDHRG--IHLVVE  (SEQ ID NO: 47)
OX2RH2_HU  CHVSHLT-GNKSLSVKLNSGLRTSGSPALSLLIILYVKLSLF--VVILVTTG--FVFFQR  (SEQ ID NO: 48)
           * *** * **:** ::*                                  *   *     . .


OX2RH1_MU  LEATSAIEEDEMQPYASYTEKSNPLYDTVTKVEAFPVSQGEVNGTDCLTLSAIGI        (SEQ ID NO: 49)
OX2RH1_RT  SGATPDIEEDEMQPYASYTEKSNPLYDTVTTTEAHPASQGKVNGTDCLTLSAMGI        (SEQ ID NO: 50)
OX2RH2_MU  RNVTRT------------------------------------------------        (SEQ ID NO: 51)
OX2RH1_HU  SQWLQKI-----------------------------------------------        (SEQ ID NO: 52)
OX2RH2_HU  INHVRKVL----------------------------------------------        (SEQ ID NO: 53)
```

OX2R homolog polypeptide relationships (%)

		human H1	human H2	mouse H1	mouse H2	mouse H3
rat H1	Ig domain	54	52	72	73	32
	TM/cyt	?	0	84	0	0
mouse H3	Ig domain	33	29	39	46	
	TM/cyt	?	46	0	54	
mouse H2	Ig domain	60	51	82		
	TM/cyt	?	49	0		
mouse H1	Ig domain	53	47			
	TM/cyt	?	0			
human H2	Ig domain	79				

TM/cyt ?

? = sequence unavailable; "0" = no significant matching

Comparison of primate and rodent H2 with rodent H4 polypeptides; note similarity between the rodent H2 and H4:

```
pOX2RH2    1                    MGGK------QMTQN-YSTIFAEGNISQPVL  24
rOX2RH2    1                                                     0
rOX2RH4    1 MHALGRIPTLTLLIFINIFVSGSSCTDENQTIQNDSSSSLTQVNTTMSVQ  50

pOX2RH2   25 MDINAVLCCPPIALRNLIIITWEIILRGQPSCTKAYKKETNETKETNCTV  74
rOX2RH2    1                             RGQPSCIMAYKVETKETNET-CLG  23
rOX2RH4   51 MDKKALLCCFSSPLINAVLITWIIKHRHLPSCTIAYN-LDKKTNETSCLG  99
                                        *  ***  **      * ** *

pOX2RH2   75 ERITWVSRPDQNSDLQIRPVDTTHDGYYRGIVVTPDGNFHRGYHLQVLVT 124
rOX2RH2   24 RNITWASTPDHIPDLQISAVALQHEGNYLCEITTPEGNFHKVYDLQVLVP  73
rOX2RH4  100 RNITWASTPDHSPELQISAVALQHEGTYTCEIVTPEGNLEKVYDLQVLVP 149
               *** * **.  .***  *   *.* *   . **.**  . * *****

pOX2RH2  125 PEVNLFQSRNITAVCKAVTGKPAAQISWIPEGSILATKQEYWGNGTVTVK 174
rOX2RH2   74 PEVTYFLGENRTAVCEAMAGKPAAQISWTPDG-DCVTKSESHSNGTVTVR 122
rOX2RH4  150 PEVTYFPGKNRTAVCEAMAGKPAAQISWTPDG-DCVTKSESHSNGTVTVR 198
             ***. *   * **** *..********* *.*    ** *   ******.

pOX2RH2  175 STCPWEG-HKSTVTCHVSHLTGNKSLSVKLNSGLRTSGSPALSLLIILYV 223
rOX2RH2  123 STCHWEQNNVSAVSCIVSHSTGNQSLSIELSRGTTST-TP--SLLTILYV 169
rOX2RH4  199 STCHWEQNNVSVVSCLVSHSTGNQSLSIELSQGTMTT--PR-SLLTILYV 245
             *** **  . * *.* *** ***.***. *  *  ..  *  *** ****

pOX2RH2  224 KLSLFVVILVTTGFVFFQRINHVRKVL 250
rOX2RH2  170 KMVLLGIILLKVGFAFFQKRNVTRT   194
rOX2RH4  246 KMALLVIILLNVGFAFFQKRNFART   270
             *. *  .**.  ** ***. *  *
```

(SEQ ID NO: 54)
(SEQ ID NO: 55)
(SEQ ID NO: 56)
(SEQ ID NO: 57)
(SEQ ID NO: 58)
(SEQ ID NO: 59)
(SEQ ID NO: 60)
(SEQ ID NO: 61)
(SEQ ID NO: 62)
(SEQ ID NO: 63)
(SEQ ID NO: 64)
(SEQ ID NO: 65)
(SEQ ID NO: 66)
(SEQ ID NO: 67)
(SEQ ID NO: 68)
(SEQ ID NO: 69)
(SEQ ID NO: 70)